GB

NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

ICS 19.040

K 04

GB/T 2423.37-2006 / IEC 60068-2-68:1994

Replacing GB/T 2423.37-1989

Environmental Testing for Electric and Electronic Products - Part 2: Test Methods - Test L: Dust and Sand

电工电子产品环境试验 第 2 部分：试验方法 试验 L：沙尘试验

(IEC 60068-2-68:1994, Environmental Testing – Part 2: Tests – Test L: Dust and Sand, IDT)

Issued on: December 19, 2006 **Implemented on: September 01, 2007**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine;

Standardization Administration of PRC.

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Foreword

GB/T 2423 *Environmental Testing – Part 2: Test Methods* consists of several parts. This Part is Part 37 of GB/T 2423. This Part equivalently adopts IEC 60068-2-68:1994 *Environmental Testing – Part 2: Tests – Test L: Dust and Sand* (English Edition). Compared with the international standard, this Part makes the following editorial modifications:

--- Delete the foreword of the international standard;

--- Add the foreword of the national standard;

--- Use the corresponding national standard to replace the international standard;

--- Use the NOTE of 3.7 directly into the standard compilation.

This Part replaced GB/T 2423.37-1989; the differences between this Part and GB/T 2423.37-1989 are as follows:

--- Divide Test La into Tests La1 and La2; change the test conditions;

--- Add test method Lc2;

--- Add test guidance after the test methods.

The Annexes A and B of this Part are informative.

This Part was proposed by China Electrical Equipment Industry Association.

This Part shall be under the jurisdiction of National Technical Committee on Environmental Technologies of Electric and Electronic Products of Standardization Administration of China (SAC/TC 8).

Drafting organization of this Part: Guangzhou Electric Apparatus Research Institute.

Chief drafting staffs of this Part: Yan Jinglian.

The historical edition replaced by this Standard is as follows: GB/T 2423.37-1989.

Environmental Testing for Electric and Electronic Products - Part 2: Test Methods - Test L: Dust and Sand

1 General

This survey indicates the general structure of the dust/sand tests included in this Part. The structuring and a summary of the characteristics of the different tests are given in Figure 1 and Table 1. It should be noted that the dust test of IEC 60529 has its equivalent in the proposed method La2. See also Annex A.

1.1 Scope

This Part specifies test methods to determine the effects of dust and sand suspended in air, on electrotechnical products.

The test methods of this standard are not intended for the testing of air filters. Only method Lc2 is suitable for the simulation of the erosion effects of high velocity (more than 100 m/s) particles.

1.2 Description of Test L

The dust and sand tests are structured into three groups:

La: non-abrasive fine dust. A test which is primarily oriented towards investigation of the seals of the test specimen. The test specimen is exposed to a very fine dust in the form of talc or an equivalent. The effects of temperature cycling resulting in a pressure difference between the inside and outside of the specimen may be reproduced.

Lb: free settling dust. A test which is oriented towards investigation of the effects when simulating conditions at sheltered locations. The test specimen is exposed to a low-density dust atmosphere created by the intermittent injection of a small quantity of dust which is allowed to fall by gravity onto the specimen.

Lc: blown dust and sand. A test which is oriented towards investigation of the seals and the effect of erosion when simulating outdoor and vehicle conditions. The test specimen is exposed to either a turbulent or a laminar air flow to which is added a quantity of dust, sand or a dust/sand mixture.

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